State of California Regional Water Quality Control Board San Diego Region

## EXECUTIVE OFFICER SUMMARY REPORT August 8, 2012

ITEM: 9

SUBJECT: Time Schedule Order: Fallbrook Public Utility District,

Discharge to Pacific Ocean via the Oceanside Ocean Outfall: An Order Establishing an Interim Total Residual Chlorine Effluent Limitation and a Compliance Schedule of Tasks to Comply with the Total Residual Chlorine Effluent Limitation Prescribed in Order No. R9-2012-0004 (NPDES Permit No. CA0108031). (Tentative Time Schedule Order

No. R9-2012-0005) (Ben Neill)

PURPOSE: To adopt Tentative Time Schedule Order No. R9-2012-0005.

RECOMMENDATION: Adoption of Tentative Time Schedule Order No. R9-2012-

0005 is recommended.

**KEY ISSUES:** 

- 1. Time Schedule Order No. R9-2012-0005 is necessary because the tentative NPDES permit for the Fallbrook Public Utility District (FPUD) Treatment Plant No.1 discharge, which is the subject of Item No. 8 of today's agenda, prescribes new effluent limitations for total residual chlorine that FPUD cannot meet without additional treatment. The Tentative Time Schedule Order establishes a time schedule for FPUD to bring the discharge into compliance with the total residual chlorine effluent limitations. The time schedule is as short as possible taking into account the time necessary for FPUD to design, construct, and implement operation of the new dechlorination facilities to meet the total residual chlorine effluent limitations.
- 2. The Tentative Time Schedule Order prescribes interim effluent limitations for total residual chlorine that will be effective during the time necessary for FPUD to design, construct and implement operation of new treatment facilities to meet the final effluent limitations. A temporary discharge meeting the interim total residual chlorine effluent limitations is not expected to cause adverse water quality impacts due to the dilution

achieved by combining FPUD's discharge, which averages approximately 1.4 million gallons per day (MGD), with the City of Oceanside's unchlorinated discharge, which averages approximately 13 MGD, through the Oceanside Ocean Outfall.

DISCUSSION:

FPUD is the owner and operator of Treatment Plant No. 1 (Facility), a municipal publicly owned treatment works (POTW). The Facility discharges treated wastewater through the shared Oceanside Ocean Outfall with the City of Oceanside, U.S. Marine Corps Base Camp Pendleton and Genentech Inc. FPUD's Facility discharge is currently regulated by Order No. R9-2006-002, which prescribes the following performance goal for concentration and mass loading of total chlorine residual in the effluent:

**Total Residual Chlorine Performance Goal** 

Units	6-Month Median	Maximum Daily	Instant. Maximum
μg/L	180	700	5,300
lbs/day	4.0	16	120

As required by that Order, FPUD submitted an application for permit reissuance on September 30, 2010. Current Order No. R9-2006-002 expired on June 1, 2011 and was administratively extended in accordance with federal regulations. Tentative Order No. R9-2012-0004 (see agenda Item No. 8) reissues the NPDES Permit for the Facility discharge.

In developing Order No. R9-2012-0004, a reasonable potential analysis was conducted using the monitoring data submitted by FPUD during the previous permit cycle. FPUD monitors its effluent on a daily basis, taking a grab sample from the Fallbrook Land Outfall prior to mixing with other discharges in the Oceanside Ocean Outfall. The sample is analyzed, using an U.S. EPA approved total residual chlorine test method having sensitivity to 10  $\mu$ g/L.

The reasonable potential analysis determined that the performance goal must be converted to an effluent limitation because concentrations of total chlorine residual in the effluent have risen significantly after FPUD increased chlorination of its effluent in 2007. Whereas 6-month median values for total chlorine residual concentrations had ranged between 50 and

150 micrograms per liter ( $\mu$ g/l) previously, the reported 6-month median values are between 180  $\mu$ g/l to 2,100  $\mu$ g/l after the increase. The increased chlorination was necessary for FPUD to meet Title 22, California Department of Health regulations for distribution of recycled water for landscape irrigation. FPUD transports chlorinated water through its land outfall to the Oceanside Ocean Outfall in order to distribute recycled water to a user near the coast. This distribution method differs from that used by other recycled water agencies in the San Diego Region who discharge unchlorinated treated wastewater to ocean outfalls and provide highly treated chlorinated recycled water to users in separate distribution systems.

Current treatment facilities at FPUD's Facility cannot meet the new effluent limitations for total residual chlorine, necessitating the need for Time Schedule Order No. R9-2012-0005. FPUD has plans in place to construct dechlorination control measures at the Facility. The Tentative Time Schedule Order includes the following interim effluent limitations that will remain in effect until FPUD implements operation of the new dechlorination facilities to meet the total residual chlorine final effluent limitations:

Interim Total Residual Chlorine Effluent Limitations

Units	6-Month Median	Maximum Daily	Instant. Maximum
mg/L	5.4	11.12	11.12
lbs/day	122	252	252

The Tentative Time Schedule Order also establishes a schedule for FPUD to bring the discharge into compliance with the total residual chlorine final effluent limitations no later than March 31, 2016.

FPUD submitted comments on the Tentative Time Schedule Order along with their comments on Tentative Order No. R9-2012-0004 (see agenda package, Item No. 8). Responses to FPUD comments and any errata will be provided with the supplemental agenda package.

LEGAL CONCERNS:

None

SUPPORTING DOCUMENTS:

- 1. Tentative Time Schedule Order No. R9-2012-0005
- 2. FPUD comment letter dated July 9, 2012 provided as supporting document No. 3 with previous Agenda Item No. 8.

PUBLIC NOTICE:

A public notice of the Tentative Time Schedule Order was published in the San Diego Union-Tribune and the North County Times on June 15, 2012 and posted on the San Diego Water Board web site on June 15, 2012. Copies of the Tentative Time Schedule Order were emailed to Fallbrook Public Utility District on June 15, 2012.